

Title (en)  
TURBOMACHINE WITH RING ROOM EXTENSION AND BLADE

Title (de)  
STRÖMUNGSMASCHINE MIT RINGRAUMERWEITERUNG UND SCHAUFEL

Title (fr)  
TURBOMACHINE À ÉLARGISSEMENT D'ESPACE ANNULAIRE ET AUBE

Publication  
**EP 3043022 B1 20231018 (DE)**

Application  
**EP 15196895 A 20151127**

Priority  
DE 102014225689 A 20141212

Abstract (en)  
[origin: US2016168998A1] Disclosed is a turbomachine including a stator, a rotor rotatable about an axis of rotation, and an annulus for carrying a core flow, the annulus having a side wall on the stator and a side wall on the rotor, at least one airfoil array having a plurality of airfoils being disposed in the annulus. In a departure from an ideal aerodynamic annulus contour, a radial annulus enlargement begins upstream of the airfoils and extends downstream up to an aft portion of the airfoil array that follows the ideal aerodynamic annulus contour. Also disclosed is an airfoil for such a turbomachine.

IPC 8 full level  
**F01D 5/14** (2006.01)

CPC (source: EP US)  
**F01D 5/02** (2013.01 - US); **F01D 5/141** (2013.01 - US); **F01D 5/143** (2013.01 - EP US); **F01D 5/145** (2013.01 - EP US);  
**F01D 9/041** (2013.01 - US); **F04D 29/284** (2013.01 - US); **F04D 29/324** (2013.01 - US); **F04D 29/444** (2013.01 - US);  
**F05D 2260/97** (2013.01 - US); **Y02T 50/60** (2013.01 - EP US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3043022 A1 20160713; EP 3043022 B1 20231018**; DE 102014225689 A1 20160714; ES 2964365 T3 20240405; US 10570743 B2 20200225;  
US 2016168998 A1 20160616

DOCDB simple family (application)  
**EP 15196895 A 20151127**; DE 102014225689 A 20141212; ES 15196895 T 20151127; US 201514966121 A 20151211